REMARKS

This response is provided in response to the Office Action mailed April 19, 2005. Claims 56-60, 69 and 70 are pending in the instant application.

Rejection Under 35 U.S.C. § 103

Claims 56-60, 69 and 70 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Rasmussen *et al.* More specifically, the Action asserts that Rasmussen *et al.* teaches an isolated polypeptide comprising a polypeptide sequence having 99.6% identity with SEQ ID NO:5, and that it would have been *prima facie* obvious to one of ordinary skill in the art to produce an antibody to this polypeptide once it was isolated.

Applicants maintain their traversal of this basis of rejection and submit that even assuming *arguendo* that Rasmussen *et al.* taught each element of the claimed invention, Rasmussen *et al.* fails to render the claimed invention obvious, since the reference fails to provide the requisite teaching or suggestion of the desirability of the claimed invention. Applicants submit that the Examiner has not demonstrated any motivation to combine the cited references to achieve the claimed invention. As established by the courts and enunciated in the M.P.E.P., "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention when there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." M.P.E.P., 8th Ed. § 2143.01. In the present case, the reference fails to teach, suggest or motivate the skilled artisan to achieve the claimed invention. Rasmussen *et al.* teaches the identification of polypeptides and polynucleotide sequences that are present in normal human keratinocytes, for the purpose of developing bioinformatic information. Rasmussen *et al.* does not, for example, describe any uses of such sequences or any association with disease that might motivate a skilled artisan to develop antibodies for therapeutic or diagnostic uses.

Applicants further emphasize that the mere fact that the teachings of the prior art *can* be combined or modified, or that a person having ordinary skill in the art is *capable* of combining or modifying the teachings of the prior art, does not make the resultant combination

prima facie obvious, as the prior art must also suggest the desirability of the combination (*see, e.g., In re Mills,* 16 USPQ2d 1430 (Fed. Cir. 1990); *In re Fritch,* 23 USPQ2d 1780 (Fed. Cir. 1992)). Applicants note that Rasmussen *et al.* describes the sequencing of multiple proteins present in normal human keratinocytes, in an effort to integrate protein and DNA sequence information, identify protein sequence similarities, and prepare DNA probes to clone the genes corresponding to these proteins (page 960, lines 1-9). However, Rasmussen *et al.* fails to teach or suggest any advantage or desirability of producing antibodies specific for the identified polypeptides. Rasmussen *et al.* provide absolutely no suggestion or motivation to further study these polypeptides. In addition, Applicants submit that Rasmussen *et al.* fail to provide any teaching regarding the specifically recited functional fragments identified within the caspase-14 polypeptide of SEQ ID NO:5, *e.g.*, the large and small subunits and, thus, provides absolutely no motivation to produce antibodies specific for these fragments of caspase-14.

In response to these arguments, the Examiner maintained the rejection on the basis that, although the prior art does not explicitly teach or suggest the production of antibodies to any of the disclosed polypeptides (including caspase-14), established scientific principles render the production of such antibodies implicitly obvious. The Examiner quoted *In re Fine*, which enunciates the legal principle that "the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. 837 F.2d 1071(Fed. Cir. 1988). In addition, the Examiner noted that the Board of Patent Appeals and Interferences has taken the position that once an antigen has been isolated, the manufacture of monoclonal antibodies against it is *prima facie* obvious. *Ex parte Ehrlich* , (3 USPQ 2d 1011 (1987).

Applicants respectfully disagree with this rationale, and submit that the established case law clearly holds that in order for an antibody to be obvious in light of the polypeptide it specifically binds, there must still be a demonstrated motivation to produce such an antibody. Indeed, this is clearly set forth in *Ex parte Ehrlich*, which holds that "it would have been obvious to one of ordinary skill in the art at the time the present invention was made to use

the basic method of Kohler and Milstein to form monoclonal antibodies specific for human interferon **since human fibroblast interferon was a known antigen (Ganfield, Stewart) of unquestioned research interest as an antiviral or antitumor agent**" (emphasis added). An antigen of interest is clearly defined as a polypeptide having characteristics that would motivate the skilled artisan to produce antibodies to said polypeptide. Based upon *Ex parte Ehrlich*, these include antibodies to clinically important antigens, including those of unquestioned research interest as a therapeutic agent.

Applicants further submit that Rasmussen *et al.* provide absolutely no teaching or suggestion that the sequences identified have any clinical relevance or represent important clinical targets. Thus, Rasmussen et al. simply does not provide the motivation required, even under the guidance of *Ex parte Ehrlich*, to produce antibodies to caspase-14, as presently claimed.

Furthermore, Applicants note that the courts have consistently held that in order to establish *prima facie* obviousness, an Examiner must provide reasons as to why a skilled artisan would be motivated to teach the claimed invention, in light of the particular problem being faced by the inventor. As described specifically in *In re Rouffet*, "In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." 149 F.3d 1350, 1357 (Fed. Cir. 1998. Applicants submit that there is absolutely no demonstration on the part of the Examiner that a skilled artisan, in developing diagnostic or therapeutic agents to treat diseases or conditions associated with aberrant cell growth or apoptosis, would be motivated to produce antibodies against the polypeptides identified by Rasmussen et al. as being expressed in normal keratinocytes. Clearly, no such motivation could possibly be provided by the teachings of Rasmussen *et al.* and, thus, the presently claimed invention, drawn to such antibodies, cannot possibly be obvious in light of Rasmussen *et al.*

In conclusion, Applicants submit that a motivation to produce antibodies to a particular polypeptide must still be provided under *Ex parte Ehrlich*, albeit explicitly or implicitly, and such motivation is simply not provided by the teachings of Rasmussen *et al.*

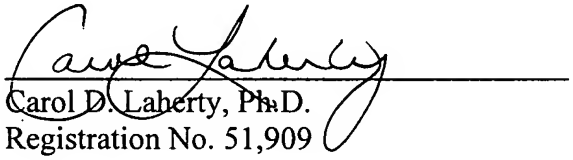
Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this basis of rejection, in light of the remarks provided above.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Applicants respectfully submit that the pending claims are allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC



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